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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,263	03/17/2005	Mamoru Nagao	267547US0PCT	2055
22850	7590	03/27/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
YANG, JIE				
ART UNIT		PAPER NUMBER		
1793				
NOTIFICATION DATE		DELIVERY MODE		
03/27/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

# Office Action Summary

**Application No.**

10/528,263

**Applicant(s)**

NAGAO ET AL.

**Examiner**

JIE YANG

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 6/5/2006;12/12/2007
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-7 are pending in application, wherein claims 1, 3-7 are amended. New IDS marked 12/12/2007 has been signed. The initial reference AW listed on IDS marked 06/05/2006 has been signed.

#### ***Status of the Precious Rejection***

The previous rejection of claims 1, 3-6 under 35 U.S.C. 103 (a) as being unpatentable over Kuroda et al (US 6,372,056 B1, thereafter US'056) is maintained. The amendments in claims 1, 3-6 have been addressed as following.

The previous rejection of claim 2 under 35 U.S.C. 103 (a) as being unpatentable over US '056 in view of Tsukamoto (US 5,156,692, thereafter "692) is maintained.

The previous rejection of claim 7 under 35 U.S.C. 103 (a) as being unpatentable over US'056 in view of Bae et al (US 6,264,759 B1, thereafter '759) is maintained. The amendments in claim 7 have been addressed as following.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al (US 6,372,056 B1, thereafter US'056).

US'056 is applied to the claims 1, and 3-6, for the same reason as stated in the previous rejection dated 9/27/2007.

The amendments in the instant claims do not change the scope of the initial claims.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'056 in view of Tsukamoto (US 5,156,692, thereafter US'692).

US'056 in view of US'692 is applied to the claim 2, for the same reason as stated in the previous rejection dated 9/27/2007.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'056 in view of Bae et al (US 6,264,759 B1, thereafter US'759).

US'056 in view of US'759 is applied to the claim 7, for the same reason as stated in the previous rejection dated 9/27/2007.

The amendments in the instant claim do not change the scope of the initial claim.

### ***Response to Arguments***

Applicant's arguments filed on 12/12/2007 with respect to claims 1-7 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

1, It would not have been obvious to one skilled in the art to modify the individual range of Si, P, S, and Ni of Kuroda to be the critical ranges as claimed by application; then it surely would not have been obvious to one skilled in the art to modify all 5 element ranges to be precisely those critical ranges found in applications' claim 1 (Refer to settle No. 7, 9, and 10);

2, Kuroda teaches away from claimed invention because Kuroda's samples C-1 and C-2 have a tensile strength, which are outside of Kuroda's but in inside that of applicants; and

3, Neither the combination of Kuroda and Tsukamoto nor the combination of Kuroda and Bae renders obvious applicants' claims 2 and 7, because Tsukamoto does not render obvious the C, P, and S ranges and Bae includes the 0.0055wt% B, which will lead to the inferior wire drawability property as well as inferior RA $\sigma$  as shown in the alloy No.13.

**Responses are as follows:**

Regarding argument 1, as pointed out in the previous office action marked 09/27/2007, all five element composition ranges (C, Si, Mn, P, and S) disclosed by US'056 overlap the composition ranges of the instant claim 1, which is a prima facie case of obviousness. SEE MPEP 2144.05 I. More specifically, US'056 teaches Si could be 1.47wt%; P: 0.011wt%;

and S: 0.009wt% (Table 1 of US'056), which meet the Si, P, and S critical ranges as recited in the discussion related to the alloy No.7 and 9. Regarding alloy No. 10, not only Ni but also Cr and N are out of the claimed ranges, therefore, applicant failed to prove 0.31wt% Ni is the only reason (critical factor) to result the inferior wire drawability property as well as inferior RA $\sigma$  in the alloy No.10.

Regarding argument 2, as pointed out in the previous office action marked 09/27/2007, US'056 teaches a rolled spring steel superior in workability with tensile strength less or equal to 1200 MPa (Abstract and Fig. 1 of US'056), which overlaps the claimed tensile strength range (912-1300( $\pm$ 30)MPa). The applicants failed to show worked samples with tensile strength in the range of Kuroda's samples C-1 and C-2.

Regarding argument 3, applicant's arguments are against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, US'056 in view of US'692 teaches the limitations of instant claim 2, while US'056 in view of US'759 teaches the limitations of the instant

Art Unit: 1793

claim 7. The motivations for combining these references can refer to office action marked 09/27/2007. Still regarding argument 3, US'056 teaches Si could be 1.47wt%; P: 0.011wt%; and S: 0.009wt% (Table 1 of US'056), which meet the Si, P, and S critical ranges as recited in the discussion related to the alloy No.7 and 9 and Bae teaches adding 0.0013 wt% B (Table 1 of US'759), which is within the B critical ranges as recited in the discussion related to the alloy No.13.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-270-1884. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY  
/Roy King/  
Supervisory Patent Examiner, Art Unit 1793